

CLAIMS

What is claimed is:

1. A refrigeration unit having a cabinet defining a storage cavity open at a front side covered by a door mounted to the front of the cabinet by two hinge assemblies at least one of which includes first and second mounting brackets spaced apart along a pivot axis on each side of a cam assembly including:

a first cam having an undulating face surface including at least one oblique ramp surface and having an opposite back surface defining a key member engaging a corresponding key member of the first mounting bracket to prevent movement of the first cam member with respect to the first mounting bracket; and

a second cam having a complementary undulating face surface with at least one ramp surface and being matable with the face surface of the first cam, the second cam also having an opposite back surface defining a key member engaging a corresponding key member of the second mounting bracket to prevent movement of the second cam with respect to the second mounting bracket;

wherein the first cam can rotate with respect to the second cam when the door is opened and closed such that engagement of the opposing ramp surfaces biases the door toward the cabinet.

2. The apparatus of claim 1, wherein the key members of the first and second cams are axially extending pins and the key members of the first and second mounting brackets are keyway openings sized to receive the pins.

3. The apparatus of claim 2, wherein each of the first and second cams and the first and second mounting brackets includes two key members.

4. The apparatus of claim 1, wherein the first and second cams are made of a low friction, lubricious material.

5. The apparatus of claim 1, wherein the first cam has two radially spaced ramp surfaces aligned for engagement with two radially spaced ramp surfaces of the second cam.

6. The apparatus of claim 1, further including a hinge pin disposed along the pivot axis through axial openings in the first and second cams.
7. The apparatus of claim 6, wherein the back side of the second cam defines a sleeve aligned with the axially opening receiving the hinge pin and extending through an opening in the second mounting bracket.
8. The apparatus of claim 1, wherein the second mounting bracket is a flat plate mounted to the door for rotation about the pivot axis.
9. The apparatus of claim 1, wherein second mounting bracket includes a stop member disposed to be in abutting relation with the first mounting bracket at a fully open position of the door so as to prevent further rotation of the door about the pivot axis.

10. A refrigeration unit, comprising a cabinet defining a storage cavity open at a front side covered by a door mounted to the front of the cabinet, wherein the door has an inner surface defining at least one pair of vertically aligned shelf support mounts, wherein the shelf support mounts support at least one door shelf comprising a bottom and a side rail with opposite ends extending generally perpendicular to the door defining a pair of shelf mounts for engaging the shelf support mounts such that the door shelf can be detached from the shelf support by tilting the door shelf with respect to the shelf support and moving the door shelf away from the door.

11. The apparatus of claim 10, wherein the inner surface of the door is defined by an insert liner.

12. The apparatus of claim 11, wherein the inset liner is a thermoformed plastic.

13. The apparatus of claim 11, wherein the shelf support includes a pair of laterally spaced uprights.

14. The apparatus of claim 13, wherein the uprights include the shelf support mounts.

15. The apparatus of claim 14, wherein the shelf support mounts are laterally extending bosses and the shelf mounts are tracks sized to receive the shelf support mounts.

16. The apparatus of claim 15, wherein the tracks have an open end toward the terminal ends of the door shelf side rail ends, the tracks define a straight portion adjacent the open end and an angled portion extending at an oblique angle from the straight portion to a closed end.

17. A refrigeration unit, comprising a cabinet defining a storage cavity with a frontal access opening covered by a hinged door mounted to the face of the cabinet, the cabinet having opposite first and second inner walls defining a pair of vertically aligned rests for a planar shelf sized so that opposite edges contact the rests, wherein the first inner wall defines a concave recess adjacent an upper side of the rest, whereby the shelf can be pivoted upward about the rest of the second wall and dislocated from both rests for removal from the cabinet without the door being swung clear of the access opening.

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18. The apparatus of claim 17, wherein the first and second inner walls are defined by an insert liner.

19. The apparatus of claim 18, wherein the insert liner is a thermoformed plastic.

20. The apparatus of claim 17, further comprising a plurality of shelves and wherein the first and second inner walls define a plurality of vertically aligned rests spaced apart at different heights within the storage cavity.

21. The apparatus of claim 17, wherein the concave recess extends from the access opening a distance less than the length of an edge of the shelf.

22. A refrigeration unit, comprising:
a cabinet defining a storage cavity having an access opening in a face of the cabinet;
a door hinged to the cabinet face to cover the access opening, the door having a door shelf extending into the storage cavity; and

5 a planar shelf supported by the cabinet in a horizontal orientation within the storage cavity such that a front portion of the shelf is disposed beneath the door shelf, the shelf including a visual indicator of the approximate location of the innermost extension of the door shelf when the door is closed.

23. The apparatus of claim 22, wherein the indicator includes at least one of graphic and text indicia corresponding to the location of the door shelf when the door is closed.

24. The apparatus of claim 23, wherein the shelf is transparent and the indicia is located at the underside of the shelf.

25. The apparatus of claim 24, wherein the indicia is applied by one of etching and printing.

26. The apparatus of claim 23, wherein the door shelf has a contoured profile and the indicia has a corresponding contour.

27. The apparatus of claim 26, wherein the shelf includes an edge guard mounted at a front edge of the shelf having a contoured inner edge corresponding to that of the door shelf.

28. A refrigeration unit, comprising:
a cabinet defining a storage cavity with an access opening at a face of the cabinet; and
a door hinged to the cabinet face to cover the access opening, the door having a top
member, framing, a floating face panel and an overlay panel mounted to the face panel for
concealing the cabinet, wherein the framing defines a retaining lip extending around at least a
portion of the perimeter of the face panel disposed within a gap between the overlay panel
and the face panel so as to retain the face panel in the door.

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29. The apparatus of claim 28, further comprising spacers disposed between the
face panel and the overlay panel.

30. The apparatus of claim 28, wherein the top member retains the face panel in
the framing from above.

31. The apparatus of claim 28, wherein the top member is removable.

32. The apparatus of claim 28, wherein the top member includes upper and lower
components, the lower component defining a lip extending downwardly past a top edge of
the face panel.

33. The apparatus of claim 28, further including upper and lower door hinges
mounted to the cabinet and the overlay panel.

34. The apparatus of claim 28, wherein the door further includes a filler material
disposed behind the face panel to bias the face panel against the retaining lip.